

ice and snow formed on said surface.

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(Amended) A method of creating a composition and using said composition for deicing or preventing the formation of ice and snow on surfaces, objects, or the like, comprising:

removing the sugar from sugar beet molasses;

mixing the byproduct resulting from the removal of sugar

from sugar beet molasses with water and a chloride salt selected from a group consisting of calcium chloride, sodium chloride, potassium chloride, magnesium chloride and mixtures thereof to obtain a solution;

spreading said solution on said surfaces or objects in an effective amount to remove ice or snow formed thereon or to prevent the accumulation of ice or snow thereon.

REMARKS

The Applicant has carefully reviewed the Office Action of August 4, 1999 and acknowledges with appreciation the substantive allowance of Claims 4-6, 8-11, 13, 14, and 17.

In response to that Office Action, the Applicant now amends Claim 1 to specifically recite magnesium chloride, calcium chloride, sodium chloride and potassium

chloride, as well as mixtures thereof. In Claim 2, the term "additional" has been deleted. Claims 3-6 are now canceled without prejudice.

Original Claims 8-9 are now canceled without prejudice and rewritten in independent form as new Claim 18. This claim explicitly references anti-skid agents selected from a group consisting of sand, gravel, cinders, limestone, aggregate, fly ash, river rock and mixtures thereof.

The subject matter of substantially allowed Claim 10 is now incorporated into Claim 1 while Claim 10 is canceled without prejudice. Claim 11 is amended to depend from new Claim 1. Claim 12 is canceled without prejudice and Claims 13 and 14 are amended to properly reference "desugared" sugar beet molasses. Further, Claim 14 is rewritten to explicitly recite a mixture of desugared sugar beet molasses and rock salt.

Claims 15-16 are amended to explicitly recite the amount of the composition utilized and the amount of desugared sugar beet molasses present in the composition.

Claim 17 is amended to explicitly recite chloride salts selected from a group consisting of calcium chloride, sodium chloride, potassium chloride, magnesium chloride and mixtures thereof. The amount of each component in the composition is not explicitly indicated in Claim 17. However, a claim to explicit amounts and concentrations is not necessary under the patent statutes. The claim as written is believed to define over the prior art. It also has clearly defined metes and bounds with the mixing step incorporating a by product resulting from the removal of sugar from sugar beet molasses with water and



chloride salt in substantially any possible amounts or concentrations.

After fully considering the amended claims, it is believed that the Examiner will agree that all the claims now meet the requirements of 35 U.S.C. Section 112, 2nd paragraph and accordingly, any rejection of these claims under that provision is now improper and should be withdrawn.

Turning now to the substantive issues, Claims 15-16 clearly patentably distinguish over the disclosure in Chemical Abstract no. 105:80842. This Chemical Abstract broadly discloses the concept of utilizing the waste solution from the sugar beet process in a deicer. That deicer explicitly incorporates fly ash and carbon black. Importantly, the proposed deicer is explicitly for use on crop fields.

No where in this chemical abstract is it suggested to utilize the waste solution from the sugar beet process in a deicing composition with any of the components set forth in Claim 1 including sodium formate, calcium magnesium acetate, potassium acetate, ethylene glycol, di-ethylene glycol, magnesium chloride, calcium chloride, sodium chloride, potassium chloride and mixtures thereof. In fact, salts such as magnesium chloride, calcium chloride, sodium chloride and potassium chloride are harmful to most plants when applied in any significant concentration. As such, adding such salts to the composition disclosed in the Chemical Abstract is not suggested by this art. In fact, it is contraindicated for the purpose of this Chemical Abstract. Accordingly, this Chemical Abstract certainly does not suggest the desirability of combining the waste solution from

the sugar beet process with chloride salt as suggested by the Examiner. Thus, it is clear that this reference fails to suggest preventing the accumulation of ice or snow on a surface by spreading a composition including 25-99% desugared sugar beet molasses and 1-75% by volume of a component selected from the group consisting of sodium formate, calcium magnesium acetate, potassium acetate, ethylene glycol, di-ethylene glycol, magnesium chloride, calcium chloride, sodium chloride, potassium chloride and mixtures thereof as set forth in Claim 15 or this combination when further mixed with an anti-skid agent selected from a group consisting of sand, gravel, cinders, limestone, aggregate, fly ash, river rock and mixtures thereof as set forth in Claim 16.

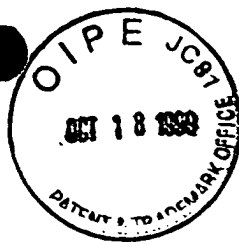
As noted by the Court of Appeals for the Federal Circuit in In re Laskowski, 10 USPQ 2nd 1397 (Fed. Cir. 1989), “[t]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification.” In this instance, it is clear that the cited Chemical Abstract fails to provide any suggestion to prevent the accumulation of ice or snow by spreading a composition of desugared sugar beet molasses and one of the claimed additional components. Certainly, the reference gives no indication that any advantage is to be achieved as a result and, accordingly, Claims 15-16 clearly patentably distinguish over this prior art reference.

Similarly, Claims 1, 2 and 7 very clearly patentably distinguish over U.S. Patent 5,639,319 to Daly. Specifically, Claim 1 has been amended to incorporate the subject

matter of substantively allowed Claim 10 relating to the fact that the desugared sugar beet molasses has 60-75% suspended solids. Of course, the incorporation of the subject matter of substantively allowed Claim 10 into Claim 1 places Claim 1 in condition for allowance over this prior art reference. The same is also true with respect to Claims 2 and 7 which depend from Claim 1, incorporate the subject matter thereof and therefore patentably distinguish for the same reasons.

In summary, it is believed that the Examiner will agree that the presently pending claims meet all the requirement of 35 U.S.C. Section 112. Additionally, with the incorporation of the subject matter of substantively allowed Claim 10 into Claim 1, Claim 1 as well as remaining dependent Claims 2, 7 and 11 all patentably distinguish over the prior art and should be formally allowed. Since Claim 13 was not the subject of any rejection in the original Office Action, it has been maintained in its original form (except for the correction of an inadvertent transcription error) and is also believed to be in condition for formal allowance. Claim 14 has been amended so as to more clearly refer to a mixture of desugared sugar beet molasses and rock salt. Since there were no substantive rejections of this claim, it too is now believed to be in condition for formal allowance.

Amended Claims 15-16 now more definitively define the invention so as to overcome the rejections under 35 U.S.C. Section 112 by specifying the amount of the composition as utilized in the method. These claims also clearly define over the prior art



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for the reason set forth above in this response. Finally, Claim 17 has been amended to explicitly recite calcium chloride, sodium chloride, potassium chloride and magnesium chloride thereby overcoming the rejections under 35 U.S.C. Section 112. Since there was no substantive rejection of this claim, this claim is therefore in condition for formal allowance. Upon careful review and consideration it is believed that the Examiner will agree with this proposition. Accordingly, the early issuance of a Formal Notice of Allowance is earnestly solicited.

Respectfully submitted,

KING AND SCHICKLI

Warren D. Schickli
Registration No. 31,057

Corporate Gateway, Suite 210
3070 Harrodsburg Road
Lexington, Kentucky 40503
(606) 223-4050

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